



California Regional Water Quality Control Board

San Diego Region



Linda S. Adams
Secretary for
Environmental Protection

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Arnold Schwarzenegger
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(858) 467-2952 • Fax (858) 571-6972
[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

April 20, 2010

Certified Mail – Return Receipt Requested
Article Number: 7009 1410 0002 2347 4237

John Cahill, Municipal Projects Manager
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008

In reply, refer to:

Reg. Measure	367309
Place	739754
Party	7838

Dear Mr. Cahill:

**Subject: Action on Request to Amend Clean Water Act Section 401
Water Quality Certification No. 09C-048 for the Encinas
Creek Bridge Replacement Project**

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) is amending the Encinas Creek Bridge Replacement project, Certification number 09C-048. This amendment has been requested by the City of Carlsbad.

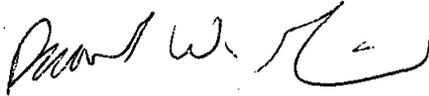
The proposed amendment includes the placement of additional riprap to repair areas of erosion recently caused by coincident high tides and storm-induced large waves. The erosion is parallel to and partly under Carlsbad Boulevard (Pacific Coast Highway, State Route 1). The erosion has threatened the stability of the roadway and a sewer line.

Any petition for reconsideration of this Certification must be filed with the State Water Resources Control Board within 30 days of certification action (23 CCR § 3867). If no petition is received, it will be assumed that City of Carlsbad has accepted and will comply with all conditions of the Certification. Failure to comply with all conditions of this Certification may result in enforcement actions against the City of Carlsbad.

Changes the Water Quality Certification are shown as ~~strikeout~~ and underlined font in the attached, amended Water Quality Certification. Revised construction plans are also attached.

In the subject line of any response, please include the requested "In reply refer to:" information located in the heading of this letter. For questions pertaining to the subject matter, please contact Mike Porter at (858) 467-2726 or mporter@waterboards.ca.gov.

Respectfully,



David W. Gibson
Executive Officer
San Diego Regional Water Quality Control Board

Cc:

Mr. Robert Smith
U.S. Army Corps of Engineers
San Diego Field Office
6010 Hidden Valley Road
Suite 105
Carlsbad, CA 92011
Robert.R.Smith@spl01.usace.army.mil

Mr. Eric Raffini
Wetlands Regulatory Office
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105
R9-WTR8-Mailbox@epa.gov

State Water Resources Control Board
Division of Water Quality
401 Water Quality Certification and Wetlands Unit
P.O. Box 100
Sacramento, CA 95812-0100
Stateboard401@waterboards.ca.gov

Mr. Jacob Moeder, Associate Engineer
Transportation Department
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008
Jacob.Moeder@carlsbadca.gov

Attachments:

A - Amended Water Quality Certification 09C-048.

B - Revised Construction Plans dated April 7, 2010.

Amended Certification No. 09C-048

ATTACHMENT A

AMENDED WATER QUALITY CERTIFICATION



California Regional Water Quality Control Board San Diego Region



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AMENDED Action on Request
for
Clean Water Act Section 401 Water Quality Certification
and
Waste Discharge Requirements
for
Discharge of Dredged and/or Fill Materials

PROJECT: Encinas Creek Bridge Replacement,
Certification Number (09C-048),
WDID: 9000001939

APPLICANT: John Cahill, Municipal Projects Manager
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008

CIWQS Reg. Meas. ID: 367309 Place ID: 739754 Party ID: 7838
--

ACTION:

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Waiver of Waste Discharge Requirements
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017 DWQ	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004 DWQ

PROJECT DESCRIPTION: The City proposes to install a prefabricated arch concrete bridge structure in place of the existing concrete bridge. Similar to the existing bridge, the new bridge would be a culvert style bridge with a concrete base that would be covered with sand and cobble over time.

The proposed new structure would be approximately 26 feet and 2 inches narrower than the existing bridge. This proposed reduction in width is because the bridge is currently oversized. In addition, to minimize the construction impacts on the west side, the wingwalls would be placed parallel to the roadway.

The City has also proposed to install up to 278 linear-feet (0.051-acre) of riprap to repair wave-caused erosion parallel to Carlsbad Boulevard and around a sewer line as shown in Attachment B (revised construction plans).

California Environmental Protection Agency

STANDARD CONDITIONS:

The following three standard conditions apply to all Certification actions, except as noted under Condition 3 for denials (Action 3).

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the California Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).
2. This Certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity of any non-denial Certification action (Actions 1 and 2) must be conditioned upon total payment of the full fee required under 23 CCR section 3833, unless otherwise stated in writing by the certifying agency.

ADDITIONAL CONDITIONS:

In addition to the three standard conditions, the City of Carlsbad must satisfy the following:

A. GENERAL CONDITIONS:

1. The City of Carlsbad must, at all times, fully comply with the engineering plans, specifications and technical reports submitted to the California Regional Water Quality Control Board, San Diego Region (Regional Board), to support this 401 Water Quality Certification (Certification) and all subsequent submittals required as part of this Certification and as described in Attachment 1. The conditions within this Certification must supersede conflicting provisions within such plans submitted prior to the Certification action. Any modifications thereto, would require notification to the Regional Board and reevaluation for individual Waste Discharge Requirements and/or Certification amendment.
2. During construction, the City of Carlsbad must maintain a copy of this Certification at the project site so as to be available at all times to site personnel and agencies.

3. The City of Carlsbad must permit the Regional Board or its authorized representative at all times, upon presentation of credentials:
 - a. Entry onto project premises, including all areas on which wetland fill or wetland mitigation is located or in which records are kept.
 - b. Access to copy any records required to be kept under the terms and conditions of this Certification.
 - c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Certification.
 - d. Sampling of any discharge or surface water covered by this Order.
4. The City of Carlsbad must notify the Regional Board **within 24 hours** of any unauthorized discharge, including hazardous or toxic materials, to waters of the U.S. and/or State; measures that were implemented to stop and contain the discharge; measures implemented to clean-up the discharge; the volume and type of materials discharged and recovered; and additional best management practice (BMPs) or other measures that will be implemented to prevent future discharges.
5. The City of Carlsbad must, at all times, maintain appropriate types and sufficient quantities of materials onsite to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the U.S. and/or State.
6. This Certification is not transferable to any person except after notice to the Executive Officer of the Regional Board. The City of Carlsbad must also notify the Regional Board of any change in ownership of the project area. Notification must include, but not be limited to, a statement that the property owner has provided the purchaser or transferee with a copy of the Section 401 Water Quality Certification and that the purchaser or transferee understands the Certification requirements and must implement them. If the property is sold, the seller and purchaser must sign and date the notification. If the Certification is transferred, the Certification holder and transferee must sign and date the notification. The notification for transfer of mitigation responsibility shall include a signed statement from the new party demonstrating acceptance and understanding of the responsibility to meet the mitigation conditions and applicable requirements of the Certification. Notification must be provided within **10 days** of the sale and/or transfer of the property.
7. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation must be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure

compliance with the water quality standards and other pertinent requirements incorporated into this Certification.

8. In response to a suspected violation of any condition of this Certification, the Regional Board may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the Regional Board deems appropriate, provided that the burden, including costs, of the reports must bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
9. In response to any violation of the conditions of this Certification, the Regional Board may add to or modify the conditions of this Certification as appropriate to ensure compliance.
10. City of Carlsbad and successor owners must submit annual progress reports to the Regional Board prior to **August 1** of each year following the issuance of this Certification until the project has reached completion.

B. PROJECT CONDITIONS:

1. Prior to the start of the project, and annually thereafter, the City of Carlsbad must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response, and BMP implementation and maintenance.
2. The City of Carlsbad must comply with the requirements of State Water Resources Control Board Water Quality Order No. 2003-0017-DWQ, Statewide General Waste Discharge Requirements for discharges of dredged or fill material that have received State Water Quality Certification. These General Waste Discharge Requirement are accessible at:
http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/general_orders/go_wdr401regulated_projects.pdf.
3. The City of Carlsbad must notify the Regional Board in writing at least **5 days** prior to the actual commencement of dredge, fill, and discharge activities.
4. The treatment, storage, and disposal of wastewater during the life of the project must be done in accordance with waste discharge requirements established by the Regional Board pursuant to CWC § 13260.
5. Discharges of concentrated flow during construction or after completion must not cause downstream erosion or damage to properties or stream habitat.
6. Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or

the State or placed in locations that may be subjected to storm flows. Pollutants discharged to areas within a stream diversion area must be removed at the end of each work day or sooner if rain is predicted.

7. All surface waters, including ponded waters, must be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.
8. Substances hazardous to aquatic life including, but not limited to, petroleum products, raw cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each project activity involving hazardous materials.

C. COMPENSATORY MITIGATION FOR LOSS OF WATERS OF THE U.S./STATE

1. The City of Carlsbad must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the United States/State within 9 months of project completion. Restoration must include grading of disturbed areas to pre-project contours and revegetation with native species. The City of Carlsbad must implement all necessary BMPs to control erosion and runoff from areas associated with this project.
2. The City of Carlsbad must submit a report (including topography maps and planting locations) to the Regional Board **within 90 days** of completion of revegetation site preparation and planting, describing as-built status of the revegetation project.
3. Throughout the revegetation program maintenance period, revegetation areas must be maintained free of perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the revegetation areas.
4. Any maintenance activities that do not contribute to the success of the revegetation site and enhancement of beneficial uses and ecological functions and services are prohibited. Maintenance activities are limited to the removal of trash and debris, removal of exotic plant species, replacement

of dead native plant species and remedial measures deemed necessary for the success of the restoration program.

5. **Responsible Party Updates:** The City of Carlsbad must provide the name and contact information of any third party accepting responsibility for implementing the mitigation requirements of this Certification. The notification must be submitted to the Regional Board **within 30 days** of the transfer of responsibility. The notification must include a signed statement from the new party demonstrating acceptance and understanding of the responsibility to meet the mitigation conditions and applicable requirements of the Certification.
6. For purposes of this Certification, establishment is defined as the creation of vegetated or unvegetated waters of the U.S./State where the resource has never previously existed (e.g. conversion of nonnative grassland to a freshwater marsh). Restoration is divided into two activities, re-establishment and rehabilitation. Re-establishment is defined as the return of natural/historic functions to a site where vegetated or unvegetated waters of the U.S./State previously existed (e.g., removal of fill material to restore a drainage). Rehabilitation is defined as the improvement of the general suite of functions of degraded vegetated or unvegetated waters of the U.S./State (e.g., removal of a heavy infestation or monoculture of exotic plant species from jurisdictional areas and replacing with native species). Enhancement is defined as the improvement to one or two functions of existing vegetated or unvegetated waters of the U.S./State (e.g., removal of small patches of exotic plant species from an area containing predominantly natural plant species). Preservation is defined as the acquisition and legal protection from future impacts in perpetuity of existing vegetated or unvegetated waters of the U.S./State (e.g., conservation easement).

D. STREAM PHOTO DOCUMENTATION PROCEDURE

1. The City of Carlsbad, and its successors, must conduct photo documentation of the project site, including all areas of permanent and temporary impact, prior to and after project construction, and revegetation areas, including all areas of permanent and temporary impact, prior to and after project construction. Photo documentation must be conducted in accordance with the State Water Resources Control Board Standard Operating Procedure 4.2.1.4: Stream Photo Documentation Procedure, included as Attachment Number 5. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced. The City of Carlsbad must submit this information in a photo documentation report to the Regional Board with the project and revegetation completion reports. The report must include a compact disc that contains digital files of all the photos (jpeg file type or similar).

E. GEOGRAPHIC INFORMATION SYSTEM REPORTING

1. The City of Carlsbad must submit Geographic Information System (GIS) shape files of the impact and revegetation areas **within 30 days** of project impacts and the mitigation area **within 30 days** of revegetation installation. All impact and revegetation areas shapefiles must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.

F. REPORTING:

1. All information requested in this Certification is pursuant to California Water Code (CWC) section 13267. Civil liability may be administratively imposed by the Regional Board for failure to furnish requested information pursuant to CWC section 13268.
2. All reports and information submitted to the Regional Board must be submitted in both hardcopy and electronic format. The preferred electronic format for each report submission is one file in PDF format that is also Optical Character Recognition (OCR) capable.
3. The City of Carlsbad must submit a report to the Regional Board **within 30 days** of completion of the project. The report should include as-built drawings no bigger than 11" x 17" and photos of the completed project.
4. All applications, reports, or information submitted to the Regional Board must be signed and certified as follows:
 - a. For a corporation, by a responsible corporate officer of at least the level of vice president.
 - b. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 - c. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
5. A duly authorized representative of a person designated in Items 4.a. through 4.c. above may sign documents if:
 - a. The authorization is made in writing by a person described in Items 4.a. through 4.c. above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c. The written authorization is submitted to the Regional Board Executive Officer.

6. All applications, reports, or information submitted to the Regional Board must be signed and certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

7. The City of Carlsbad must submit reports required under this Certification, or other information required by the Regional Board, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification; Project No. 09C-048
9174 Sky Park Court, Suite 100
San Diego, California 92123

6. Required Reports: The following list summarizes the reports required per the conditions of this Certification to be submitted to the Regional Board.

Report Topic	Certification Condition	Due Date(s)
Spill notification	A.4	Within 24 hours of discharge
Certification transfer	A.6	Within 10 days of sale/transfer
Annual progress report	A.10	Annually, before August 1
Dredge/fill commencement	B.3	5 days prior to dredge/fill commencement
Revegetation completion report	C.2	Within 90 days of completion of revegetation installation
Responsible party updates	C.5	Within 30 days of transfer of responsibility
Stream Photo Documentation	D.1	With the revegetation and project completion reports,
GIS shapefiles	E.1	Within 30 days of impacts/revegetation installation
Project completion report	F.3	Within 30 days of project completion

PUBLIC NOTIFICATION OF PROJECT APPLICATION:

On June 22, 2009 receipt of the project application was posted on the Regional Board web site to serve as appropriate notification to the public.

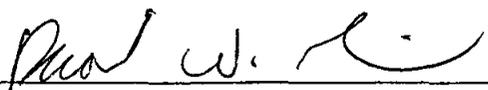
REGIONAL WATER QUALITY CONTROL BOARD CONTACT PERSON:

Mike Porter and ~~Bree Bourassa~~
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123
858-467-2726
mporter@waterboards.ca.gov
858-627-3933
~~bbourassa@waterboards.ca.gov~~

WATER QUALITY CERTIFICATION:

I hereby certify that the proposed discharge from the Encinas Creek Bridge Replacement project (Project No. 09C-048) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017 DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the Regional Board may issue waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicants' project description and/or on the attached Project Information Sheet, and (b) on compliance with all applicable requirements of the Regional Board's Water Quality Control Plan (Basin Plan).



DAVID W. GIBSON
Executive Officer
Regional Water Quality Control Board

4-20-2010
Date

Encinas Creek Bridge Replacement

09C-048 **AMENDED**

- Attachments:
1. Project Information
 2. Distribution List
 3. Location Map
 4. Site Map
 5. Stream Photodocumentation Procedure

**ATTACHMENT 1
PROJECT INFORMATION**

Applicant: City of Carlsbad
Attention: John Cahill
1635 Faraday Avenue
Carlsbad, CA 92008
Telephone: 760-602-2726
Facsimile: 760602-8562
Email: jcahi@ci.carlsbad.ca.us

Applicant Representatives: EDAW/AECOM
Attention: Michelle Fehrensén
1420 Kettner Boulevard, Suite 500
San Diego, CA 92101
Telephone: 619-233-1454
Facsimile: 619-233-0952
Email: michelle.fehrensén@aecom.com

Project Name: Encinas Creek Bridge Replacement Project

Project Location: Encinas Creek Bridge is located along southbound Carlsbad Boulevard approximately 0.6 mile south of Palomar Airport Road and 1 mile north of Poinsettia lane in the City of Carlsbad.
Latitude: 33° 6'56.91"N Longitude: 117° 19'30.24"W

Type of Project: Bridge Replacement

Need for Project: The replacement of the bridge has been recommended by the California Department of Transportation due to severe deterioration.

Project Description: The City proposes to install a prefabricated arch concrete bridge structure in place of the existing concrete bridge. Similar to the existing bridge, the new bridge would be a culvert style bridge with a concrete base that would be covered with sand and cobble over time. The proposed new structure would be approximately 26 feet and 2 inches narrower than the existing bridge. This proposed reduction in width is because the bridge is currently oversized. In addition, to minimize the construction impacts on the west side, the wingwalls would be placed parallel to the roadway.

The City has also proposed to replace up to 278 linear-feet (0.051-acre) of riprap to repair wave-caused erosion parallel to Carlsbad Boulevard and around a sewer line as shown in Attachment B (revised construction plans). The erosion removed riprap and road base.

Federal Agency/Permit:	U.S. Army Corps of Engineers §404, NWP 14, Lanika Cervantes
Other Required Regulatory Approvals:	California Department of Fish and Game, Streambed Alteration Agreement, Marilyn Fluharty
California Environmental Quality Act (CEQA) Compliance:	Mitigated Negative Declaration, Encinas Creek Bridge Replacement, August 20, 2009, SCH# 2009061110, City of Carlsbad
Receiving Water:	Encinas Creek, Carlsbad HU, Encinas HA (904.40)
Affected Waters of the United States:	<p>Temporary:</p> <p>Wetland – 0.004 acre (Coastal and Valley Freshwater Marsh)</p> <p>Streambed – 0.064 acre</p> <p><u>Permanent:</u></p> <p><u>Tidal – 0.051-acre (278-linear feet).</u></p>
Related Projects Implemented/to be Implemented by the Applicant(s):	N/A
Compensatory Mitigation:	Revegetation of temporary impacts to 0.004 acre of Coastal and Valley Freshwater Marsh shall occur in-place at a 1:1 replacement ratio.
Public Notices:	<p>June 22, 2009 - Regional Board website</p> <p><u>April 12, 2010 - Regional Board website (AMENDMENT)</u></p>
Fees:	<p>Total Due: \$759.00</p> <p>Total Paid: \$759.00 (Check No. 190622)</p> <p><u>Amendment Fees: \$2419.00 (check No. 202659)</u></p>

CIWQS: Regulatory Measure ID: 367309
 Place ID: 739754
 Party ID: 7838

Encinas Creek Bridge Replacement

09C-048 AMENDED

**ATTACHMENT 2
DISTRIBUTION LIST**

cc via email:

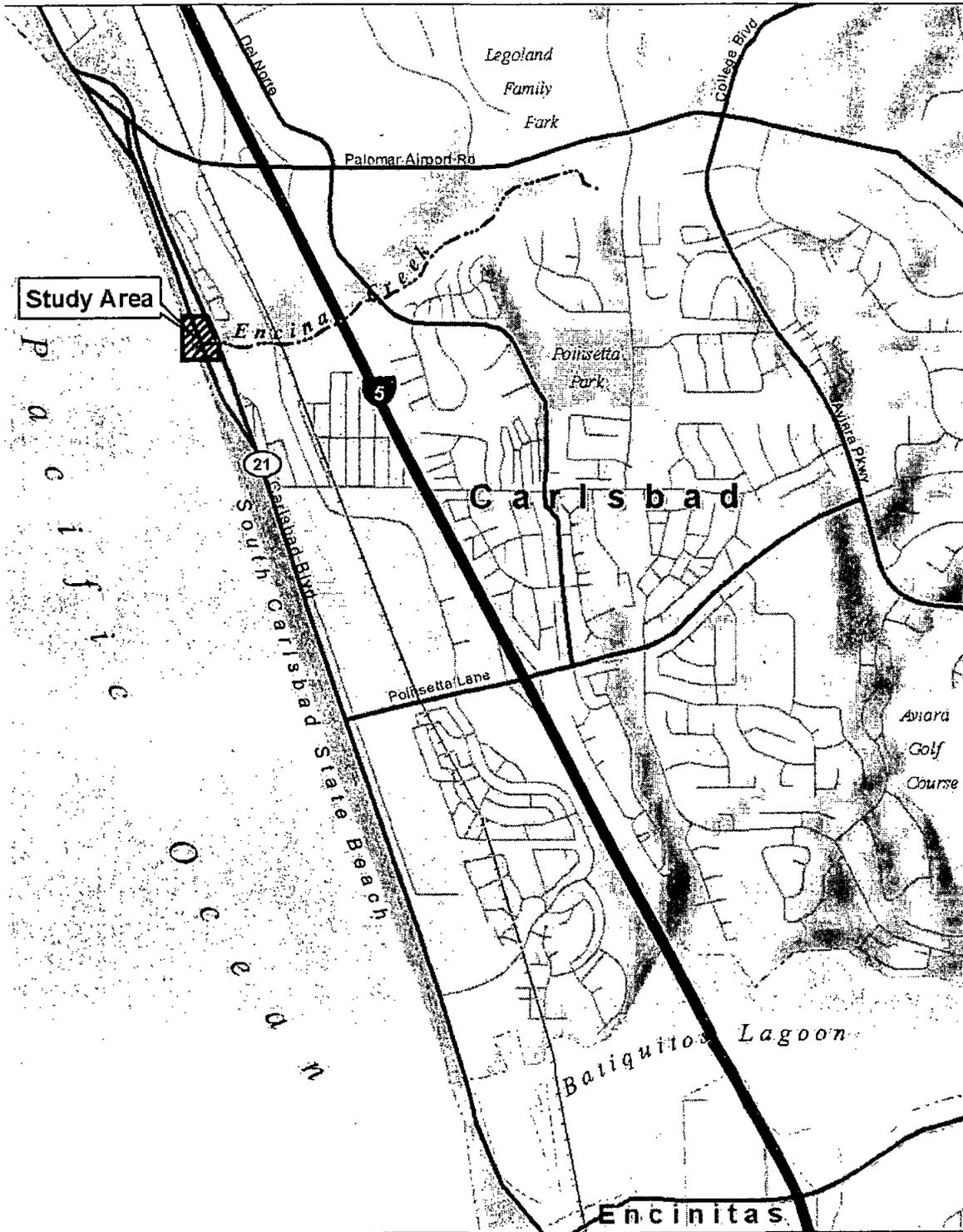
Lanika Cervantes
U.S. Army Corps of Engineers, Regulatory Branch
Lanika.L.Cervantes@usace.army.mil

Marilyn Fluharty
California Department of Fish and Game
mfluharty@dfg.ca.gov

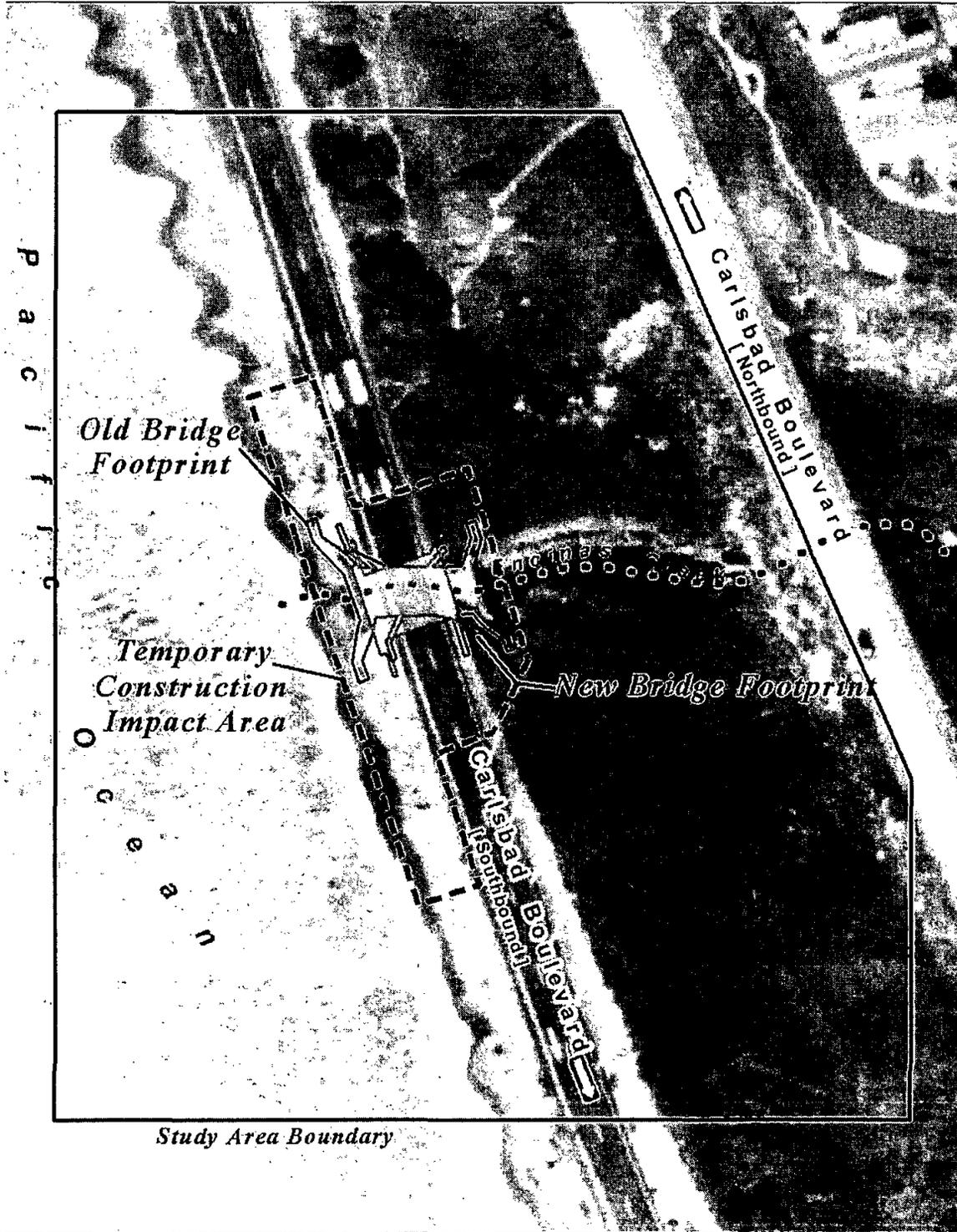
David Smith
Wetlands Regulatory Office
U.S. Environmental Protection Agency, Region 9
R9-WTR8-Mailbox@epa.gov

Bill Orme
State Water Resources Control Board, Division of Water Quality
Stateboard401@waterboards.ca.gov

ATTACHMENT 3 PROJECT LOCATION



ATTACHMENT 4
SITE MAP



ATTACHMENT 5 STREAM PHOTO DOCUMENTATION PROCEDURES

Standard Operating Procedure (SOP)

Stream Photo Documentation Procedure

(CARCD 2001, Written by TAC Visual Assessments work group)

Introduction:

Photographs provide a qualitative, and potentially semi-quantitative, record of conditions in a watershed or on a water body. Photographs can be used to document general conditions on a reach of a stream during a stream walk, pollution events or other impacts, assess resource conditions over time, or can be used to document temporal progress for restoration efforts or other projects designed to benefit water quality. Photographic technology is available to anyone and it does not require a large degree of training or expensive equipment. Photos can be used in reports, presentations, or uploaded onto a computer website or GIS program. This approach is useful in providing a visual portrait of water resources to those who may never have the opportunity to actually visit a monitoring site.

Equipment:

Use the same camera to the extent possible for each photo throughout the duration of the project. Either 35 mm color or digital color cameras are recommended, accompanied by a telephoto lens. If you must change cameras during the program, replace the original camera with a similar one comparable in terms of media (digital vs. 35 mm) and other characteristics. A complete equipment list is suggested as follows:

Required:

- Camera and backup camera
- Folder with copies of previous photos (do not carry original photos in the field)
- Topographic and/or road map
- Aerial photos if available
- Compass
- Timepiece
- Extra film or digital disk capacity (whichever is applicable)
- Extra batteries for camera (if applicable)
- Photo-log data sheets or, alternatively, a bound notebook dedicated to the project
- Yellow photo sign form and black marker, or, alternatively, a small black board and chalk

Optional:

- GPS unit
- Stadia rod (for scale on landscape shots)
- Ruler (for scale on close up views of streams and vegetation)
- Steel fence posts for dedicating fixed photo points in the absence of available fixed landmarks

How to Access Aerial Photographs:

Aerial Photos can be obtained from the following federal agencies:

USGS Earth Science Information Center
507 National Center
12201 Sunrise Valley Drive
Reston, VA 22092
800-USA-MAPS

USDA Consolidated Farm Service Agencies
Aerial Photography Field Office
222 West 2300 South
P.O. Box 30010
Salt Lake City, UT 84103-0010
801-524-5856

Cartographic and Architectural Branch
National Archives and Records Administration
8601 Adelphi Road
College park, MD 20740-6001
301-713-7040

Roles and Duties of Team:

The team should be comprised of a minimum of two people, and preferably three people for restoration or other water quality improvement projects, as follows:

1. Primary Photographer
2. Subject, target for centering the photo and providing scale
3. Person responsible for determining geographic position and holding the photo sign forms or blackboard.

One of these people is also responsible for taking field notes to describe and record photos and photo points.

Safety Concerns:

Persons involved in photo monitoring should **ALWAYS** put safety first. For safety reasons, always have at least two 2 volunteers for the survey. Make sure that the

area(s) you are surveying either are accessible to the public or that you have obtained permission from the landowner prior to the survey.

Some safety concerns that may be encountered during the survey include, but are not limited to:

- Inclement weather
- Flood conditions, fast flowing water, or very cold water
- Poisonous plants (e.g.: poison oak)
- Dangerous insects and animals (e.g.: bees, rattlesnakes, range animals such as cattle, etc.)
- Harmful or hazardous trash (e.g.: broken glass, hypodermic needles, human feces)

We recommend that the volunteer coordinator or leader discuss the potential hazards with all volunteers prior to any fieldwork.

General Instructions:

From the inception of any photo documentation project until it is completed, always take each photo from the same position (photo point), and at the same bearing and vertical angle at that photo point. Photo point positions should be thoroughly documented, including photographs taken of the photo point. Refer to copies of previous photos when arriving at the photo point. Try to maintain a level (horizontal) camera view unless the terrain is sloped. (If the photo can not be horizontal due to the slope, then record the angle for that photo.) When photo points are first being selected, consider the type of project (meadow or stream restoration, vegetation management for fire control, ambient or event monitoring as part of a stream walk, etc.) and refer to the guidance listed on *Suggestions for Photo Points by Type of Project*.

When taking photographs, try to include landscape features that are unlikely to change over several years (buildings, other structures, and landscape features such as peaks, rock outcrops, large trees, etc.) so that repeat photos will be easy to position. Lighting is, of course, a key ingredient so give consideration to the angle of light, cloud cover, background, shadows, and contrasts. Close view photographs taken from the north (i.e., facing south) will minimize shadows. Medium and long view photos are best shot with the sun at the photographer's back. Some artistic expression is encouraged as some photos may be used on websites and in slide shows (early morning and late evening shots may be useful for this purpose). Seasonal changes can be used to advantage as foliage, stream flow, cloud cover, and site access fluctuate. It is often important to include a ruler, stadia rod, person, farm animal, or automobile in photos to convey the scale of the image. Of particular concern is the angle from which the photo is taken. Oftentimes an overhead or elevated shot from a bridge, cliff, peak, tree, etc. will be instrumental in conveying the full dimensions of the

project. Of most importance overall, however, is being aware of the goal(s) of the project and capturing images that clearly demonstrate progress towards achieving those goal(s). Again, reference to *Suggestions for Photo Points by Type of Project* may be helpful.

If possible, try to include a black board or yellow photo sign in the view, marked at a minimum with the location, subject, time and date of the photograph. A blank photo sign form is included in this document.

Recording Information:

Use a systematic method of recording information about each project, photo point, and photo. The following information should be entered on the photo-log forms (blank form included in this document) or in a dedicated notebook:

- Project or group name, and contract number (if applicable, e.g., for funded restoration projects)
- General location (stream, beach, city, etc.), and short narrative description of project's habitat type, goals, etc.
- Photographer and other team members
- Photo number
- Date
- Time (for each photograph)
- Photo point information, including:
 - Name or other unique identifier (abbreviated name and/or ID number)
 - Narrative description of location including proximity to and direction from notable landscape features like roads, fence lines, creeks, rock outcrops, large trees, buildings, previous photo points, etc. – sufficient for future photographers who have never visited the project to locate the photo point
 - Latitude, longitude, and altitude from map or GPS unit
- Magnetic compass bearing from the photo point to the subject
- Specific information about the subject of the photo
- Optional additional information: a true compass bearing (corrected for declination) from photo point to subject, time of sunrise and sunset (check newspaper or almanac), and cloud cover.

For ambient monitoring, the stream and shore walk form should be attached or referenced in the photo-log.

When monitoring the implementation of restoration, fuel reduction, or Best Management Practices (BMP) projects, include or attach to the photo-log a narrative description of observable progress in achieving the goals of the project. Provide supplementary information along with the photo, such as noticeable changes in habitat, wildlife, and water quality and quantity.

Archive all photos, along with the associated photo-log information, in a protected environment.

The Photo Point: Establishing Position of Photographer:

1. Have available a variety of methods for establishing position: maps, aerial photos, GPS, permanent markers and landmarks, etc. If the primary method fails (e.g., a GPS or lost marker post) then have an alternate method (map, aerial photo, copy of an original photograph of the photo-point, etc).
2. Select an existing structure or landmark (mailbox, telephone pole, benchmark, large rock, etc.), identify its latitude and longitude, and choose (and record for future use) the permanent position of the photographer relative to that landmark. Alternatively, choose the procedure described in *Monitoring California's Annual Rangeland Vegetation* (UC/DANR Leaflet 21486, Dec. 1990). This procedure involves placing a permanently marked steel fence post to establish the position of the photographer.
3. For restoration, fuel reduction, and BMP projects, photograph the photo-points and carry copies of those photographs on subsequent field visits.

Determining the Compass Bearing:

1. Select and record the permanent magnetic bearing of the photo center view. You can also record the true compass bearing (corrected for declination) but do not substitute this for the magnetic bearing. Include a prominent landmark in a set position within the view. If possible, have an assistant stand at a fixed distance from both the photographer and the center of the view, holding a stadia rod if available, within the view of the camera; preferably position the stadia rod on one established, consistent side of the view for each photo (right or left side).
2. Alternatively, use the procedure described in *Monitoring California's Annual Rangeland Vegetation* (UC/DANR Leaflet 21486, Dec. 1990). This procedure involves placing a permanently marked steel fence post to establish the position of the focal point (photo center).
3. When performing ambient or event photo monitoring, and when a compass is not available, then refer to a map and record the approximate bearing as north, south, east or west.

Suggestions for Photo Points by Type of Project:

Ambient or Event Monitoring, Including Photography Associated with Narrative Visual Assessments:

1. When first beginning an ambient monitoring program take representative long and/or medium view photos of stream reaches and segments of shoreline being monitored. Show the positions of these photos on a map, preferably on the stream/shore walk form. Subjects to be photographed include a representative view of the stream or shore condition at the beginning and ending positions of the segment being monitored, storm drain outfalls, confluence of tributaries, structures (e.g., bridges, dams, pipelines, etc.).
2. If possible, take a close view photograph of the substrate (streambed), algae, or submerged aquatic vegetation.
3. Time series: Photographs of these subjects at the same photo points should be repeated annually during the same season or month if possible.
4. Event monitoring refers to any unusual or sporadic conditions encountered during a stream or shore walk, such as trash dumps, turbidity events, oil spills, etc. Photograph and record information on your photo-log and on your Stream and Shore Walk Visual Assessment form. Report pollution events to the Regional Board. Report trash dumps to local authorities.

All Restoration and Fuel Reduction Projects – Time Series:

Take photos immediately before and after construction, planting, or vegetation removal. Long term monitoring should allow for at least annual photography for a minimum of three years after the project, and thereafter at 5 years and ten years.

Meadow Restoration:

1. Aerial view (satellite or airplane photography) if available.
2. In the absence of an aerial view, a landscape, long view showing an overlapping sequence of photos illustrating a long reach of stream and meadow (satellite photos, or hill close by, fly-over, etc.)

3. Long view up or down the longitudinal dimension of the creek showing riparian vegetation growth bounded on each side by grasses, sedges, or whatever that is lower in height
4. Long view of conversion of sage and other upland species back to meadow vegetation
5. Long view and medium view of streambed changes (straightened back to meandering, sediment back to gravel, etc.)
6. Medium and close views of structures, plantings, etc. intended to induce these changes

Stream Restoration/stabilization:

1. Aerial view (satellite or airplane photography) if available.
2. In the absence of an aerial view, a landscape, long-view showing all or representative sections of the project (bluff, bridge, etc.)
3. Long view up or down the stream (from stream level) showing changes in the stream bank, vegetation, etc.
4. Long view and medium view of streambed changes (thalweg, gravel, meanders, etc.)
5. Medium and close views of structures, plantings, etc. intended to induce these changes.
6. Optional: Use a tape set perpendicular across the stream channel at fixed points and include this tape in your photos described in 3 and 4 above. For specific procedures refer to Harrelson, Cheryl C., C.L. Rawlins, and John P. Potyondy, *Stream Channel Reference Sites: An Illustrated Guide to Field Techniques*, United States Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-245.

Vegetation Management for Fire Prevention ("fuel reduction"):

1. Aerial view (satellite or airplane photography) if available.

2. In the absence of an aerial view, a landscape, long view showing all or representative sections of the project (bluff, bridge, etc.)
3. Long view (wide angle if possible) showing the project area or areas. Preferably these long views should be from an elevated vantage point.
4. Medium view photos showing examples of vegetation changes, and plantings if included in the project. It is recommended that a person (preferably holding a stadia rod) be included in the view for scale
5. To the extent possible include medium and long view photos that include adjacent stream channels.

Stream Sediment Load or Erosion Monitoring:

1. Long views from bridge or other elevated position.
2. Medium views of bars and banks, with a person (preferably holding a stadia rod) in view for scale.
3. Close views of streambed with ruler or other common object in the view for scale.
4. Time series: Photograph during the dry season (low flow) once per year or after a significant flood event when streambed is visible. The flood events may be episodic in the south and seasonal in the north.
5. Optional: Use a tape set perpendicular across the stream channel at fixed points and include this tape in your photos described in 1 and 2 above. For specific procedures refer to Harrelson, Cheryl C., C.L. Rawlins, and John P. Potyondy, *Stream Channel Reference Sites: An Illustrated Guide to Field Techniques*, United States Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-245.

Encinas Creek Bridge Replacement

09C-048 **AMENDED**

PHOTO SIGN FORM: Print this form on yellow paper. Complete the following information for each photograph. Include in the photographic view so that it will be legible in the finished photo.

Location:

Subject Description:

Date:

Time:

Amended Certification No. 09C-048

ATTACHMENT B

REVISED CONSTRUCTION PLANS

GENERAL NOTES

- 1. THIS PLAN SUPERSEDES ALL OTHER PLANS PREVIOUSLY APPROVED BY THE CITY OF CARLSBAD REGARDING IMPROVEMENTS SHOWN ON THIS SET OF PLANS.
2. APPROVAL OF THIS PLAN DOES NOT LESSEN OR WAIVE ANY PORTION OF THE CARLSBAD MUNICIPAL CODE, RESOLUTION OF CONDITIONAL APPROVAL CITY STANDARDS OR OTHER ADDITIONAL DOCUMENTS LISTED HEREON AS THEY PERTAIN TO THIS PROJECT. THE ENGINEER HAS RESPONSIBLE CHARGE SHALL REVISION THESE PLANS WHEN NON-CONFORMANCE IS DISCOVERED.
3. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE CONTRACTOR OR ENGINEER-OF-WORK FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
4. A RIGHT-OF-WAY PERMIT FROM THE CITY ENGINEER WILL BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY PRIOR TO PERMIT ISSUANCE. A CERTIFICATE OF INSURANCE MUST BE FILED NAMING THE CITY OF CARLSBAD AS AN ADDITIONAL INSURED ON THE PERMITTEE'S POLICY IN THE MINIMUM AMOUNT OF \$1,000,000.00 FOR EACH OCCURRENCE OF LIABILITY. THE INSURANCE COMPANY WRITING THE POLICY MUST HAVE A RATING OF "A-" OR BETTER AND A SIZE CATEGORY OF CLASS V OR BETTER AS ESTABLISHED BY "BEST'S" KEY RATING GUIDE.
5. NO WORK SHALL BE COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
6. REVISION OF THESE PLANS MAY BE REQUIRED IF THE PROPOSED IMPROVEMENTS ARE NOT CONSTRUCTED PRIOR TO THE DEADLINE DATE OF THE IMPROVEMENT AGREEMENT.
7. NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER NOTED WITHIN THE REVISION BLOCK ON THE APPROPRIATE SHEET OF THE PLANS AND TITLE SHEET.
8. ORIGINAL DRAWINGS SHALL BECOME THE PROPERTY OF THE CITY UPON BEING SIGNED BY THE CITY ENGINEER.
9. THE ORIGINAL DRAWING SHALL BE REVISED TO REFLECT AS-BUILT CONDITIONS BY THE ENGINEER-OF-WORK PRIOR TO FINAL ACCEPTANCE OF THE WORK BY THE CITY.
10. ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
11. WHERE TRENCHES ARE WITHIN CITY EASEMENTS, A SOILS REPORT COMPRISED OF: (A) SUMMARY SHEET, (B) LABORATORY WORK SHEETS AND (C) COMPACTION CURVES SHALL BE SUBMITTED BY A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. THE SOILS REPORT WILL BE SUBMITTED TO THE CITY ENGINEERING INSPECTOR WITHIN TWO WORKING DAYS OF COMPLETION OF FIELD TESTS. THE WRITTEN FIELD COMPACTION REPORT(S) SHALL BE IMMEDIATELY SUBMITTED TO THE CITY ENGINEERING INSPECTOR UPON COMPLETION OF THE FIELD TESTS.
12. ALL INSPECTION REQUESTS OTHER THAN FOR PRECONSTRUCTION MEETING WILL BE MADE BY CALLING THE ENGINEERING 24-HOUR INSPECTION REQUEST LINE AT (760) 438-3881. INSPECTION REQUESTS MUST BE RECEIVED PRIOR TO 2:00 P.M. ON THE DAY BEFORE THE INSPECTION IS NEEDED. INSPECTIONS WILL BE MADE THE NEXT WORK DAY UNLESS YOU REQUEST OTHERWISE. REQUESTS MADE AFTER 2:00 P.M. WILL BE SCHEDULED FOR TWO FULL WORK DAYS LATER.
13. THE OWNER AND/OR APPLICANT THROUGH THE DEVELOPER AND/OR CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
14. THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER AND/OR CONCERNED AGENCY SHOWING THE DESIGN OF SHORING, BRACING, SLOPE OR OTHER PROVISIONS TO BE MADE OF WORKER PROTECTION FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET (5') OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY PRIOR TO EXCAVATION. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY CODES, TITLE 8 CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER AT THE CONTRACTOR'S EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
15. IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED WITHIN ANY WORK ZONE DURING CONSTRUCTION, OPERATIONS WILL CEASE IMMEDIATELY AND THE PERMITTEE WILL NOTIFY THE CITY ENGINEER. OPERATIONS WILL NOT RESTART UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE CITY ENGINEER TO DO SO.
16. EXCEPT FOR SHEET PILE INSTALLATION, NIGHT WORK WILL BE ALLOWED UNDER THIS EMERGENCY REPAIR CONTRACT.
17. ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY ENGINEER FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTE OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
18. NO BLASTING SHALL BE COMMENCED WITHOUT A CITY ENGINEER APPROVED BLASTING PROGRAM AND BLASTING PERMIT.
19. THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITY FACILITIES OR STRUCTURES NOT SHOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES NOT SHOWN.
20. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF THE CONSTRUCTION TO PERMIT THE REVISIONS OF THE CONSTRUCTION PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
21. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST TWO FULL WORKING DAYS PRIOR TO STARTING CONSTRUCTION NEAR THEIR FACILITIES AND SHALL COORDINATE WORK WITH A COMPANY REPRESENTATIVE.

- UNDERGROUND SERVICE ALERT (800)422-4133
SDG&E (800)680-7343
PACIFIC BELL (800)892-0123
TIME WARNER CABLE (760)438-7741
COX COMMUNICATIONS (760)806-8809
CITY OF CARLSBAD(STREETS AND STORM DRAIN) (760)434-2880
CITY OF CARLSBAD(SEWER, WATER & RECLAIMED WATER) (760)438-2722
SAN DIEGUITO WATER DISTRICT (760)633-2650
VALLECADIA WASTEWATER DISTRICT (760)753-0155
VALLECITOS WATER DISTRICT (760)744-0460
MENHAIN WATER DISTRICT (760)533-6466
BUENA SANITATION DISTRICT (760)726-1340

* AS APPROPRIATE

STREET NOTES

- 1. ALL SURVEY MONUMENTS AND POINTS THAT ARE DISTURBED BY THIS WORK SHALL BE REESTABLISHED, PERPETUATED, AND DOCUMENTED PER THE PROFESSIONAL LAND SURVEYORS ACT.
2. TWO (2) SETS OF SURVEY (CUT) SHEETS SHALL BE PROVIDED TO THE CITY ENGINEERING INSPECTOR.

SIGNING AND STRIPING NOTES

- 1. EXISTING SIGNS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY OF CARLSBAD PUBLIC WORKS YARD AT 405 OAK AVENUE.

REFERENCE DRAWINGS

AS-BUILT DRAWING TITLED: CITY OF CARLSBAD LAS ENCINAS CREEK BRIDGE REPLACEMENT BRIDGE NO. 57C-0214L (OLD) BRIDGE NO. 57C-0790L (NEW) PROJECT NO. 3919 DRAWING APPROVED OCTOBER 20, 2009

BASIS OF BEARINGS

THE BASIS OF BEARING FOR THIS SURVEY IS RECORD OF SURVEY NO. 17271 POINT NUMBERS 137 AND 142, I.E. S 35°41'29" E.

SOURCE OF TOPOGRAPHY

TOPOGRAPHY SHOWN ON THESE PLANS WAS GENERATED BY FIELD DATA COLLECTION METHODS GATHERED ON JANUARY 12, 2009, FEBRUARY 24, 2010 AND MARCH 03, 2010 BY NOLTE ASSOCIATES, INC.

BENCH MARK

DESCRIPTION: POINT 137 PER RECORD OF SURVEY NO. 17271 BEING A 2.5 INCH ALUMINUM CAP IN A STANDARD WELL MONUMENT STAMPED "LS 5215 CLSB 137." ELEVATION: 60.70 NGVD29 LOCATION: FROM THE INTERSECTION OF CANNON ROAD AND CARLSBAD BOULEVARD GO SOUTH ON CARLSBAD BOULEVARD 0.5 MI. TO SPLIT IN ROAD. TAKE RIGHT SPLIT, GO 600 FT. TO A BULB TURN AROUND AND THE POINT OF THE LEFT. POINT IS LOCATED IN THE CENTER ISLAND OF BULB TURN AROUND, 20 FT. WESTERLY OF DRAINAGE INLET BOX.

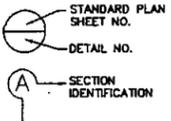
INDEX OF SHEETS

- 1. TITLE SHEET
2. GENERAL NOTES & LEGEND
3. RIP RAP REPAIRS
4. ROADWAY PROFILE-RIP RAP REPAIRS

ABBREVIATIONS

Table with 2 columns: Abbreviation and Full Name. Includes A/C ASPHALT CONCRETE, BB BEGUN BRIDGE, CL CENTER LINE, EB END BRIDGE, EL ELEVATION, EX EXISTING, FF FILTER FABRIC, MAX MAXIMUM, MIN MINIMUM, NTS NOT TO SCALE, SBHD SOUTHBOUND, SRSO SAN DIEGO REGIONAL STANDARD DRAWINGS, TYP TYPICAL.

PLAN SYMBOLS



INDEX TO STANDARD PLANS

THE FOLLOWING STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS DATED MAY 2006 ARE A PART OF THESE CONTRACT DRAWINGS

- A10A ABBREVIATIONS
A10B SYMBOLS

WORK TO BE DONE

THE IMPROVEMENT WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS, CURRENT AT THE TIME OF CONSTRUCTION, AS DIRECTED BY THE CITY ENGINEER.

- 1. CARLSBAD MUNICIPAL CODE
2. CITY OF CARLSBAD ENGINEERING STANDARDS
3. THIS SET OF PLANS
4. THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK).
5. SOILS REPORT AND RECOMMENDATIONS BY GEOLOGIC ASSOCIATES DATED AUGUST 2009
6. THE SAN DIEGO AREA REGIONAL STANDARD DRAWINGS AND AS MAY BE MODIFIED BY THE CITY OF CARLSBAD STANDARDS.
7. CITY OF CARLSBAD EMERGENCY COASTAL DEVELOPMENT PERMIT CONDITIONS DATED MARCH 17, 2010
8. CALIFORNIA STORM WATER QUALITY ASSOCIATION BMP CONSTRUCTION HANDBOOK AND CALTRANS CONSTRUCTION SITE BMP MANUAL.
9. STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, DATED MAY 2006
10. STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, DATED MAY 2006
11. THE GENERAL PROVISIONS, SUPPLEMENTAL PROVISIONS, AND TECHNICAL SPECIFICATIONS FOR LAS ENCINAS CREEK BRIDGE REPLACEMENT PROJECT CONTRACT NO. 3919, INCLUDING THE REQUIRED TIME OF COMPLETION BY MAY 28, 2010 AND THE ASSOCIATED LIQUIDATED DAMAGES CLAUSE.

LEGEND

Table with 3 columns: DESCRIPTION, DWG. NO., SYMBOL. Includes ROCK SLOPE PROTECTION (2-TON AND 4-TON), ROCK SLOPE PROTECTION (1/4-TON), BACKING NO. 2, SHEET PILES (BY CONTRACTOR), RSP FILTER FABRIC TYPE B.

100% COMPLETE

"AS BUILT"

Call toll free 1-800-422-4133. TWO WORKING DAYS BEFORE YOU DIG.

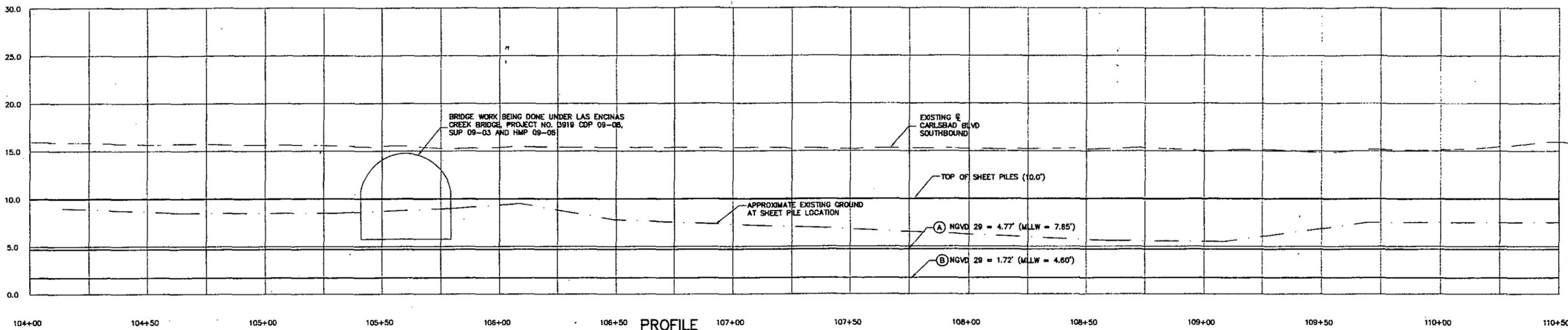
"DECLARATION OF RESPONSIBLE CHARGE" I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CARLSBAD DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.



Nolte Associates 15070 Avenue of Science, Suite 100 San Diego, California 92128 Tel 858.385.0600, Fax 858.385.0400

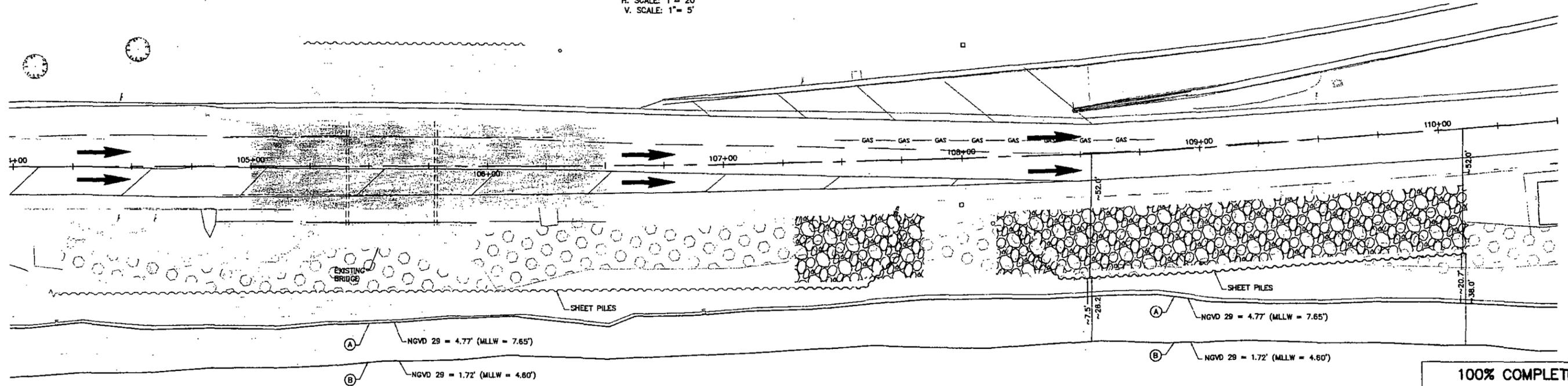
Table with 4 columns: DATE, INITIAL, DATE, INITIAL. Includes a grid for tracking design changes.

Approval and project information block including SHEET 2 of 4, CITY OF CARLSBAD ENGINEERING DEPARTMENT, CARLSBAD BLVD- RIP RAP REPAIRS GENERAL NOTES AND LEGEND, APPROVED WILLIAM F. FLUMMER, DEPUTY CITY ENGINEER, PROJECT NO., DRAWING NO.



PROFILE

H. SCALE: 1" = 20'
V. SCALE: 1" = 5'

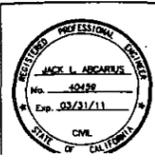
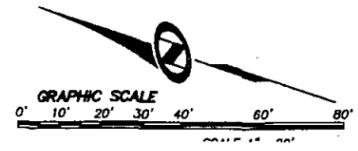


PLAN

SCALE: 1" = 20'

NOTES

- (A) THIS CONTOUR LINE REPRESENTS THE APPROXIMATE LOCATION OF THE HIGH TIDE ELEVATION OF 7.65' (MLLW) OR APPROXIMATELY 4.77' (NGVD 29) AS SURVEYED BY NOLTE ON 04/01/2010 FROM 3:00 P.M. TO 5:30 P.M.
- (B) THIS CONTOUR LINE REPRESENTS THE APPROXIMATE LOCATION OF THE MEAN HIGH WATER (MHW) ELEVATION OF 4.60' (MLLW) OR APPROXIMATELY 1.72' (NGVD 29) AS SURVEYED BY NOLTE ON 04/01/2010 FROM 3:00 P.M. TO 5:30 P.M.



Nolte Associates
15070 Avenue of Science, Suite 100
San Diego, California 92128
Tel 858.385.0500, Fax 858.385.0400
4/2/10

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL



100% COMPLETE

"AS BUILT"

RCE _____ EXP. _____ DATE _____

REVIEWED BY: _____

INSPECTOR _____ DATE _____

SHEET 4 CITY OF CARLSBAD ENGINEERING DEPARTMENT SHEETS 4

IMPROVEMENT PLANS FOR:
CARLSBAD BLVD- RIP RAP REPAIRS
ROADWAY PROFILE - RIP RAP REPAIRS

APPROVED: William E. Blumberg 04/07/10
DEPUTY CITY ENGINEER PE 28178 EXPIRES 3/31/12 DATE

DWN BY: PS PROJECT NO. 8032 DRAWING NO. 468-1
CHKD BY: JA

COMPLETE THIS SECTION

Items 1, 2, and 3. Also complete restricted Delivery if desired. Name and address on the reverse can return the card to you. Mark card to the back of the mailpiece, if space permits.

Delivered to:

Cahill
 City Projects Manager
 Carlsbad
 Faraday Ave.
 Carlsbad, CA 92008

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
 Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

Number 7009 1410 0002 2347 4237
 Service

1, February 2004

Domestic Return Receipt

102595-02-M-1540



7009 1410 0002 2347 4237
 7009 1410 0002 2347 4237

U.S. Postal Service
U.S. Postal ServiceTM
CERTIFIED MAILTM RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent to
 John Cahill, City of Carlsbad
 Street, Apt. No., or PO Box No. 1635 Faraday Ave
 City, State, ZIP+4
 Carlsbad CA 92008

PS Form 3800, August 2006 See Reverse for Instructions